

Headache and acute delirium in a young woman

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An 18-year-old female was transferred from a referring hospital where she had been admitted 5 days earlier for investigation of an occipital headache and abnormal behaviour. She had received 2 days of antibiotics for otitis media prior to that admission. During that 5-day stay, she received intravenous corticosteroids and antihistamines for a diffuse erythematous rash, presumed to be an allergic reaction to the antibiotics. In addition to the rash, she became delirious with episodic drowsiness and inattentiveness, disorientation, and inappropriate speech interrupted by periods of mutism. She was also incontinent of urine several times.

Her medical history was significant for intermittent migraine-type headaches over the preceding 6 months and a recent adjustment disorder with depressed mood. There was no history of contraceptive use or substance abuse, and she was a nonsmoker. On presentation to the emergency department, she was afebrile with a normal blood pressure and heart rate. She had a fluctuating level of attentiveness and cooperation, but no other significant clinical abnormalities — specifically, no meningismus, no fo-

cal neurological signs and no papilledema.

All initial basic laboratory tests were unremarkable. Lumbar dural puncture revealed a normal cerebrospinal fluid cell count and differential, with normal protein and glucose levels. Bacterial antigen detection tests and spinal fluid culture were negative for bacterial pathogens. Further laboratory studies including ESR (erythrocyte sedimentation rate), antinuclear antibodies, complement levels, and anti-cardiolipin antibodies were subsequently likewise normal. Figure 1 shows a non-enhanced CT (computed tomography) scan of her head, and Figure 2 shows a magnetic resonance study.

What is her likely diagnosis?

- A. Subdural hematoma along the falx cerebri
- B. Multiple sclerosis
- C. Straight sinus thrombosis
- D. Meningioma

For the Answer to this Challenge, see page 450.

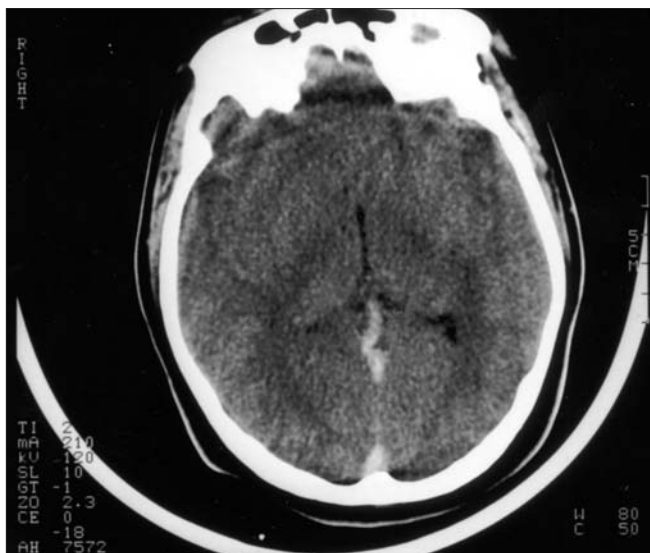


Fig. 1. Non-enhanced computed axial tomography of patient's head.

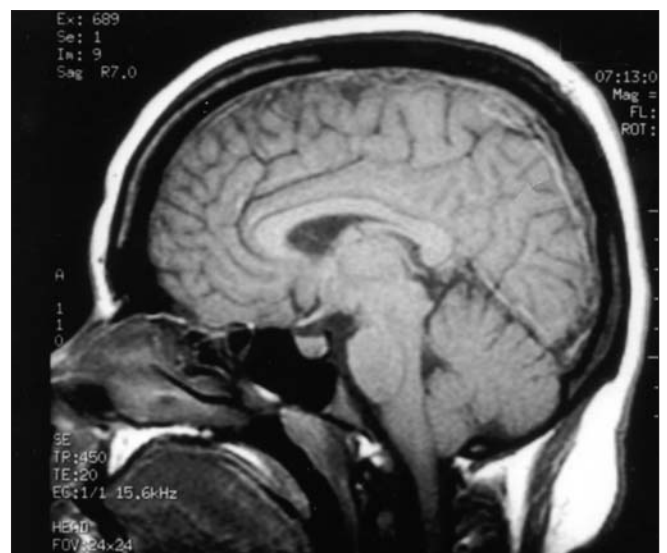


Fig. 2. Sagittal magnetic resonance imaging study of patient's head.

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